

ABSTRACT OF THE DISCLOSURE

When a first position of an exposure unit is determined by an XY positioning mechanism, a micromirror of a digital micromirror device is on/off controlled in accordance with image data within a region of a predetermined area including the first position, a light beam emitted from a light source enters the digital micromirror device, through an optical fiber and a homogenizer optical system, and modulated per each data in accordance with image data. A light beam transmitted to a reflective mirror is condensed by a condensing lens, then reflected from the reflected mirror onto a surface of a photo-curable resin, a portion within a region of a predetermined area of the photo-curable resin surface is exposed by the light beam, and the exposed portion is cured. In the same manner, the entire resin surface is exposed by repeating movement and/or exposure of the exposure unit.